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			Application Number		
			Filing Date		
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			Group Art Unit		
			Examiner Name		
Sheet	2	of	7	Attorney Docket Number	MIT8178CONT

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant Of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
1068	A2	6,014,257		Furlani et al.	01-11-2000	
	B2	6,031,652		Furlani et al.	02-29-2000	
	C2	6,038,057		Brazas, Jr. et al.	03-14-2000	
	D2	6,061,166		Furlani et al.	05-09-2000	
	E2	6,067,183		Furlani et al.	05-23-2000	
	F2	6,088,148		Furlani et al.	07-11-2000	
	G2	6,072,620		Shiono et al.	06-06-2000	
	H2	6,108,117		Furlani et al.	08-22-2000	
	I2	6,130,770		Bloom	10-10-2000	
	J2	6,141,139		Furlani et al.	10-31-2000	
	K2	6,144,481		Kowarz et al.	11-07-2000	
	L2	6,169,624	B1	Godil et al.	01-02-2001	
	M2	6,175,443	B1	Aksyuk et al.	01-16-2001	
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	P2	6,233,087	B1	Hawkins et al.	05-15-2001	
	Q2	6,238,581	B1	Hawkins et al.	05-29-2001	
	R2	6,243,194	B1	Brazas, Jr. et al.	06-05-2001	
	S2	6,252,697	B1	Hawkins et al.	06-26-2001	
	T2	6,268,952	B1	Godil et al.	07-31-2001	
	U2	6,282,012	B1	Kowarz et al.	08-28-2001	

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		Number	Kind Code ² (if known)			
46	A3	6,172,796	B1	Kowarz et al.	01-09-2001	
	B3	6,282,213	B1	Gutin et al.	08-28-2001	
	C3	6,284,560	B1	Jech, Jr. et al.	09-04-2001	
	D3	6,288,824	B1	Kastalsky	09-11-2001	
	E3	3,553,364		Lee	01-05-1971	
	F3	4,234,788		Palmer et al.	11-18-1980	
	G3	5,022,745		Zayhowski et al.	06-11-1991	
	H3	5,164,688		Larson	11-17-1992	
	I3	5,168,249		Larson	12-01-1992	
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	K3	5,291,502		Pezeshki et al.	03-01-1994	
	L3	5,311,360		Bloom et al.	05-10-1994	
	M3	5,353,641		Tang	11-11-1994	
	N3	5,561,523		Blomberg et al.	11-01-1996	
	O3	5,629,951		Changj-Hasnain et al.	05-13-1997	
	P3	5,640,133		MacDonald et al.	06-17-1997	
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R3	5,654,819		Goossen et al.	08-05-1997		
S3	5,661,592		Bornstein et al.	08-26-1997		
T3	5,696,662		Bauhahn	12-09-1997		
46	U3	5,757,536		Ricco et al.	05-26-1998	

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KBA	A5	FURLANI et al., "Analysis of grating light valves with partial surface electrodes," <i>J. Appl. Phys.</i> , Vol. 83, No. 2, pp. 629-634, January 15, 1998.		
	B5	HUNG, "Positioning, Control, and Dynamics of Electrostatic Actuators for Use in Optical and RF Systems, Ph.D. Thesis, Massachusetts Institute of Technology, August 21, 1998.		
	C5	JERMAN et al., "Miniature Fabry-Perot Interferometers Micromachined in Silicon for use in Optical Fiber WDM Systems, <i>IEEE 1991 Int. Conf. On Solid-State Sensors and Actuators, Digest of Technical Papers</i> , pp. 372, 375, 1991.		
	D5	PETERSEN, "Micromechanical light modulator array fabricated on silicon," <i>Appl. Phys. Lett.</i> , Vol. 31, No. 8, pp. 521-523, October 1977.		
	E5	HUNG et al., "Leveraged Bending for Full-Gap Positioning With Electrostatic Actuation," <i>Solid State Sensor and Actuator Workshop</i> , Hilton Head, SC, Digest, pp. 83-86, June 8-11, 1998.		
	F5	BIFANO et al., "MEMs Deformable Mirrors for Adaptive Optics," <i>Solid State Sensor and Actuator Workshop</i> , Hilton Head, SC, Digest, pp. 71-74, June 8-11, 1988.		
	G5	SOLGAARD et al., "Deformable grating optical modulator," <i>Optics Letters</i> , Vol. 17, No. 9, pp. 688-690, May 1992.		
	H5	HORENSTEIN et al., "Electrostatic Effects in Micromachined Actuators for Adaptive Optics," <i>Journal of Electrostatics</i> , Vol. 42, pp. 69-81, 1997.		
	I5	HOM, "Simulating electrostrictive deformable mirrors I. Nonlinear static analysis," <i>Smart Mater. Struct.</i> , Vol. 8, pp. 691-699, 1999.		
	J5	HOM, "Simulating electrostrictive deformable mirrors II. Nonlinear dynamic analysis," <i>Smart Mater. Struct.</i> , Vol. 8, pp. 700-708, 1999.		
	K5	MALI et al., "Development of microelectromechanical deformable mirrors for phase modulation of light," <i>Optical Eng.</i> , Vol. 36, No. 2, pp. 542-548, February 1997.		
	L5	COWEN et al., "Optical phase modulation using a refractive lenslet array and microelectromechanical deformable mirror," <i>Optical Eng.</i> , Vol. 37, No. 12, pp. 3237-3247, December 1998.		
	M5	ZHU et al., "Adaptive control of a micromachined continuous-membrane deformable mirror for aberration compensation," <i>Applied Optics</i> , vol. 38, No. 1, pp. 168-176, January 1999.		
KBA	N5	HORENSTEIN et al., "Real time optical correction using electrostatically actuated MEMs devices," <i>Journal of Electrostatics</i> , Vol. 46, pp. 91-101, 1999.		

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168A	A6	COWAN et al., "Surface Micromachined Segmented Mirrors for Adaptive Optics," <i>IEEE Jnl. Of Selected Topics in Quantum Electronics</i> , Vol. 5, No. 1, pp. 90-101, January/February 1999.	
	B6	BIFANO et al., "Microelectromechanical Deformable Mirrors," <i>IEEE Jnl. Of Selected Topics in Quantum Electronics</i> , Vol. 5, No. 1, pp. 83-89, January/February 1999.	
	C6	CHUNG et al., "Design and fabrication of 10x10 micro-spatial light modulator array for phase and amplitude modulation," <i>Sensors and Actuators</i> , Vol. 78, pp. 63-70, 1999.	
	D6	MALI, "A design-based approach to planarization in multilayer surface micromachining," <i>J. Micromech. Microeng.</i> , Vol. 9., pp. 294-299, 1999.	
	E6	GANI et al., "Variable gratings for optical switching: rigorous electromagnetic simulation and design," <i>Optical Engineering</i> , Vol. 38, No. 3, pp. 552-557, March 1999.	
	F6	HORENSTEIN et al., "Differential capacitive position sensor for planar MEMs structures with vertical motion," <i>Sensors and Actuators</i> , Vol. 80, pp. 53-61, 2000.	
	G6	BIFANO et al., "Continuous-membrane surface-micromachined silicon deformable mirror," <i>Optical Engineering</i> , Vol. 36, No. 5, pp. 1354-1360, May 1997.	
	H6	GUSTAFSON et al., "Micro-Actuated Mirrors for Beam Steering," in <i>Miniaturized systems with Micro-optics and Micromechanics II</i> , Motamedi et al, Eds., Proc. SPIE 3008, pp. 91-99, 1997.	
	I6	BURNS et al., "Designs to improve polysilicon micromirror surface topology," in <i>Miniaturized systems with Micro-optics and Micromechanics II</i> , Motamedi et al, Eds., Proc. SPIE 3008, pp. 100-110, 1997	
	J6	BURNS et al., "Optical beam steering using surface micromachined gratings and optical phased arrays," in <i>Opt. Scanning Systems: Design and Appls.</i> , Proc. SPIE 3131, pp. 99-110, 1997.	
	K6	BURNS et al., "Investigation of the Maximum Optical Power Rating for a Micro-Electro-Mechanical Device, Proceedings, <i>Transducers '97</i> , pp. 335-338, Chicago, IL, June 16-19, 1997.	
	L6	BURNS et al., "Development of microelectromechanical variable blaze gratings," <i>Sensors and Actuators A</i> , Vol. 64, pp. 7-15, 1998.	
	M6	BURNS et al., "Optical power induced damage to microelectromechanical mirrors," <i>Sensors and Actuators A</i> , Vol. 70, pp. 6-14, 1998.	
168	N6	BURNS et al., "Micro-electro-mechanical Variable Blaze Gratings," Proc., <i>IEEE 10th Annual Int. Workshop on MEMs: An Investigation of Microstructures, Sensors, Actuators, Machines, and Robots</i> , pp. 55-60, 1997.	

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16A	A7	LEE et al., "Polymeric Tunable Optical Attenuator with an Optical Monitoring Tap for WDM Transmission Network," <i>IEEE Photonics Tech. Ltrs.</i> , Vol. 11, No. 5, pp. 590-592, May 1999.	
	B7	FORD et al., "Micromechanical Fiber-Optic Attenuator with 3 μ s Response," <i>Journal of Lightwave Technology</i> , Vol. 16, No. 9, pp. 1663-1670, September 1998.	
	C7	MIN et al., "Modeling, design, fabrication and measurement of a single layer polysilicon micromirror with initial curvature compensation," <i>Sensors and Actuators</i> , Vol. 78, pp. 8-17, 1999.	
	D7	Mélendez et al., "Spectrally selective gas cell for electrooptical infrared compact multigas sensor," <i>Sensors and Actuators A</i> , Vol. 46-47, pp. 417-421, 1995.	
	E7	ROSSBERG, "Silicon micromachined infrared sensor with tunable wavelength selectivity for application in infrared spectroscopy," <i>Sensors and Actuators A</i> , Vol. 46-47, pp. 413-416, 1995.	
	F7	BURNS et al., "Nonlinear flexures for stable deflection of an electrostatically actuator micromirror," in <i>Microelectronic Structs. And MEMs for Opt. Process. III</i> , Proc. SPIE 3226, pp. 125-136, 1997.	
	G7	SINCLAIR et al., "Synthetic spectra: a tool for correlation spectroscopy," <i>Applied Optics</i> , Vol. 36, No. 15, pp. 3342-3348, May 1997.	
	H7	SINCLAIR et al., "Synthetic infrared spectra," <i>Optics Letters</i> , Vol. 22, No. 13, pp. 1036-1038, July 1997.	
	I7	HUNG et al., "The Polychromator: A MEMs Correlation Spectrometer," in <i>Microsystems Technology Laboratories Annual Rpt.</i> , Massachusetts Institute of Technology, p. 57, May 1998.	
	J7	HUNG et al., "Electrostatically Actuated Microstructures for RF Tuning and Position-Control Applications," in <i>MEMs: Research and Applications in Microelectromechanical Systems</i> , Poster Session Guidebook, Massachusetts Institute of Technology Industrial Liaison Program, p. 4, March 1998.	
16A	K7	HUNG et al., "Extending the Travel Range of Analog-Tuned Electrostatic Actuators," <i>Jnl. Of Microelectromechanical Systems</i> , Vol. 8, No. 4, pp. 497-505, December 1999.	

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